

5 METHOD AND APPARATUS FOR END TO END FORWARDING ARCHITECTURE

ABSTRACT

An end to end forwarding architecture includes a memory hub having a first
ingress interface for receiving packets from a source port. The packets have
associated ingress flow identifiers. A second ingress interface outputs the packets to a
switch fabric. An ingress controller manages how the packets are queued and output
10 to the switch fabric. The same memory hub can be used for both per flow queuing
and per Class of Service (CoS) queuing. A similar structure is used on the egress side
of the switch fabric. The end to end forwarding architecture separates per flow traffic
scheduling operations performed in a traffic manager from the per flow packet storage
15 operations performed by the memory hub.